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Application Date: May 2, 1936. No. 12467/36.

(Divided out of No. 457,763.)

Complete Specification Accepted: April 1, 1937.



## COMPLETE SPECIFICATION

## Improvements in the manufacture of Stabilised Diazo Compounds

I, JOHN STANLEY HEATON, a British Subject, of 107, Shaw Lane, Dinting, Near Glossop, Derbyshire, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

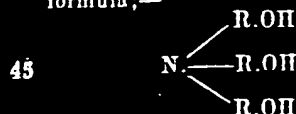
This invention relates to the production of stabilized diazo compounds.

I have found by research and experiment that arylamine diazonium salts react with tertiary amino alcohols to form compounds which have the advantage of being stable to alkalis, and to heat at the boiling point of water.

These compounds are useful for the production on the fibre of insoluble azo dyestuffs, by applying them to the fibre in mixture with a coupling component and thereafter subjecting the fibre to the action of acid which regenerates the diazonium salt and causes it to couple with the coupling component with the formation of the azo dyestuff on the fibre. In the present application, however, no claim is made to the process for production of azo dyestuffs from the condensation products whose method of preparation is hereinafter claimed.

The preparation of azo dyestuffs from condensation products such as those whose preparation is herein claimed is claimed in my co-pending application No. 13361/35, Serial number 457,763. I wish it to be understood that I make no claim in the present specification to anything claimed in my said prior specification, or to anything which would interfere with the carrying into effect of the process claimed in my said prior specification.

The amino alcohols used according to the present invention are of the general formula:—



where R represents aliphatic radicles either the same or different.

The arylamine base is diazotised in the usual manner, the resulting solution is

neutralised and mixed with an equivalent amount of the amino alcohol. After standing for a few minutes to one hour the reaction is complete, and the product separates out and can be filtered off and may be dried if required.

Instead of drying the compound it can also be used in paste form in the preparation of printing colours by mixing it with a solution of a coupling component and the required amount of thickening.

After printing and drying the fabric, the insoluble azo colour can be developed in a convenient manner by treating the fabric with an acid in a suitable manner, for instance, by passing it through a solution of an acid or by subjecting it to an atmosphere of steam containing vapours of a volatile acid.

## EXAMPLE.

2½ lbs of dianisidine base are tetrazotised in the usual manner; the tetrazo liquor is poured into a cold solution containing 2½ lbs. of soda ash and 3½ lbs. of triethanolamine. A precipitate separates, which is gathered when the tetrazo compound can no longer be detected in the reaction mixture.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that subject to the foregoing disclaimer what I claim is:—

1. The manufacture of stabilised diazo compounds by causing a tertiary amino alcohol of the general formula specified to react with the diazonium salt of an arylamine base.

2. The manufacture of stabilised diazo compounds as specified in Claim 1 by diazotising an arylamine base, neutralising the resulting solution and mixing with an equivalent amount of a tertiary amino alcohol of the general formula specified, the product obtained being filtered off and if desired dried.

3. A stabilised diazo compound when produced by the process hereinbefore particularly described and ascertained or by its obvious chemical equivalent.

Dated this 30th day of April, 1936.

MARKS & CLERK.